

# **SUPERVISE PLATOON COMPLIANCE WITH HOST-NATION, FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS AND REGULATIONS**

Subcourse EN5708

## **EDITION A**

United States Army Engineer School  
Fort Leonard Wood, Missouri 65473

5 Credit Hours

Edition Date: January 1999

## **SUBCOURSE OVERVIEW**

This subcourse addresses platoon leadership and compliance with host-nation, federal, state, and local environmental laws and regulations while participating in a field training exercise (FTX). This course is designed to provide platoon leaders with the knowledge, skills, and abilities necessary to supervise compliance with host-nation, federal, state, and local environmental laws and regulations. Platoon leaders must demonstrate knowledge of unit and environmental issues while

- Completing an environmental risk-management work sheet
- Conducting an environmental self-assessment.
- Integrating environmental training issues into the training-management cycle.

Work must be accomplished in a manner consistent with environmental laws and regulations.

You must complete the following three prerequisites before you begin studying the material in this subcourse:

- Army Correspondence Course Program (ACCP), Subcourse Engineer ( [EN5707](#)). *Comply With Host-Nation, Federal, State, and Local Environmental Laws and Regulations*. March 1998.
- ACCP, Subcourse Interschool ( [IS8718](#)). *Training / Training Management, Part I*. March 1987.
- ACCP, Subcourse ( [IS8719](#)). *Training / Training Management, Part II*. March 1987.

This subcourse reflects the doctrine that was current when this subcourse was prepared. In your work, always refer to the latest official publications.

Unless otherwise stated, the masculine gender of singular pronouns is used to refer to both men and women.

TERMINAL LEARNING OBJECTIVE:

**ACTION:** You will learn to supervise a platoon's compliance with host-nation, federal, state, and local environmental laws and regulations while conducting a FTX.

**CONDITION:** Given the information in this subcourse.

**STANDARD:** To demonstrate competency of this task, you must achieve a minimum of 70 percent on the subcourse examination.

## **TABLE OF CONTENTS**

### [Subcourse Overview](#)

[Lesson 1:](#) [Environmental Risk Management](#)

[Practice Exercise](#)

[Lesson 2:](#) [Environmental Self-Assessment](#)

[Practice Exercise](#)

[Lesson 3:](#) [Environmental Training](#)

[Practice Exercise](#)

[Appendix A: List of Common Acronyms](#)

[Appendix B: Recommended Reading List](#)

[Appendix C: Publication Extracts](#)

[EN5708 Edition A Examination](#)

FM 20-400. Military Environmental Protection.

Use the above publication [FM 20-400](#) extract to take this subcourse. At the time this subcourse was written, this was the current publication. In your work situation, always refer to the latest official publication.

## LESSON 1

### ENVIRONMENTAL RISK MANAGEMENT

Critical Task: 051-250-1002

#### OVERVIEW

##### LESSON DESCRIPTION:

This lesson addresses a platoon-level environmental risk assessment and the completion of an environmental risk-management work sheet.

##### TERMINAL LEARNING OBJECTIVE:

**ACTION:** You will learn the requirements for conducting a platoon-level environmental risk assessment and for completing an environmental risk-management work sheet

**CONDITION:** You will be given the material contained in this lesson.

**STANDARD:** You will correctly answer all practice-exercise questions at the end of this lesson.

**REFERENCES:** The material contained in this lesson was derived from FM 20-400 and TSP 051-E-0005.

#### INTRODUCTION

Environmental risk management is defined as a process to assist in preserving resources by identifying actions that negatively impact the environment and taking appropriate steps to prevent or mitigate any damage.

**1-1. Environmental Risk Assessment.** Protecting the environment has many advantages. A degraded environment may affect the ability to fight, such as when the basic necessities of air and water are contaminated. The cost of cleaning up contamination becomes an economic issue. The reckless disregard of the environment becomes a legal issue. The risk-assessment procedures addressed in this lesson help to identify a platoon's weaknesses in environmental compliance. Legal requirements vary from location to location. [Figure 1-1](#) shows a sample risk-management work sheet. Specific requirements can be obtained from the environmental office (installation, facility, or region).

A. Mission or Task:		B. Date/Time Group Begin: End:		C. Date Prepared:	
D. Prepared By (Rank, Last Name, Duty Position):					
E. Task:	F. Identify Hazards:	G. Assess Hazards:	H. Develop Controls:	I. Determine Residual Risk:	J. Implement Controls:
			SAMPLE		
K. Determine the overall mission/task risk level after controls are implemented (circle one): <div style="display: flex; justify-content: space-around; padding: 5px;"> <span>LOW (L)</span> <span>MODERATE (M)</span> <span>HIGH (H)</span> <span>EXTREMELY HIGH (E)</span> </div>					

**Figure 1-1. Sample risk-management work sheet**

**1-2. Platoon Leaders' Responsibilities.** The term "platoon leader" refers to the designated platoon leader, the platoon sergeant, or any individual designated as the leader in the absence of the first two. Army environmental responsibilities center on building an environmental ethic in soldiers. This is accomplished by training and counseling and by enforcing responsibility in subordinates. [Table 1-1](#) identifies leader responsibilities within a platoon.

Platoon Leader	Platoon Sergeant
1. Apply environmental awareness to daily activities while making sound decisions that will not harm or which will minimize damage to the environment.	
2. Communicate the Army's environmental ethic to soldiers while training them to be good environmental stewards.	
3. Develop and sustain a positive and proactive commitment to environmental protection in subordinates.	
4. Analyze the influence of environmental factors on mission accomplishment.	
5. Integrate environmental considerations into unit activities (include identifying the environmental risks associated with unit tasks).	
6. Protect the environment during all activities.	
7. Counsel soldiers on the need to protect the environment and the possible consequences for violating environmental laws and regulations.	
8. Incorporate environmental considerations during after action reviews (AARs).	
9. Support the Army's recycling program.	
10. Report hazardous material (HM) and hazardous waste (HW) spills.	
11. Ensure that soldiers are familiar with the unit's standing operating procedure (SOP) and supervise their compliance with environmental laws and regulations.	
12. Plan, conduct, and sustain environmental actions and training.	
	13. Assess the environmental risk associated with individual tasks.
	14. Train peers and subordinates to identify the environmental effects of plans, actions, and missions.

**Table 1-1. Leader responsibilities within a platoon**

**1-3. Risk-Management Work Sheet.** This lesson addresses the integration of environmental considerations into unit activities (Item 5 from [Table 1-1](#)). A preferred method for integrating environmental considerations is by using a risk-management work sheet. The following scenario describes how to complete a risk-management work sheet. Completion of a risk-management [work sheet](#) is discussed in detail in FM 20-400.

It is 22 May XX and you are a platoon leader in the 586th Engineer Company (Assault Float Bridge [AFB]). You have an operation order (OPORD) that requires your platoon to convoy from Fort Chilly to Camp Yukon on 1 June XX and return on 6 June XX. Spills during refueling have historically been a major hazard. Use the following procedure to record one hazard on the risk-management work sheet.

*Step 1.* Complete Blocks A through D ( [Figure 1-2](#)).

<b>A. Mission or Task:</b> 586th Engineer Company (AFB)		<b>B. Date/Time Group:</b> Begin: 010600RJunXX End: 061200RJunXX		<b>C. Date Prepared:</b> 22 MayXX	
<b>D. Prepared By (Rank, Last Name, Duty Position):</b> 1LT 1Lz Sample, XO					
<b>E. Task:</b>	<b>F. Identify Hazards:</b>	<b>G. Assess Hazards:</b>	<b>H. Develop Controls:</b>	<b>I. Determine Residual Risk:</b>	<b>J. Implement Controls:</b>
			<b>SAMPLE</b>		
<b>K. Determine the overall mission/task risk level after controls are implemented (circle one):</b> LOW (L)      MODERATE (M)      HIGH (H)      EXTREMELY HIGH (E)					

**Figure 1-2. Completing Blocks A through D**

*Step 2.* Complete Block E ([Figure 1-3](#)). When a task or mission is identified, an order is issued. The platoon leader, platoon sergeant, and squad leaders accomplish three actions related to the order:

- Receive and analyze the order. Ensure that the commander's intent and mission (including tasks, constraints, and risks) are completely understood. Determine any limitations that might influence the accomplishment of the task.
- Determine environmental-related constraint (actions that limit the platoon's behavior and actions that are prohibited).
- Identify specified tasks (per the order) and implied tasks (to support the specified tasks).

In Block E, write the platoon-level specified and implied tasks taken from the higher headquarters order. Also identify any anticipated constraints.

A. Mission or Task: 586th Engineer Company (AFB)		B. Date/Time Group Begin: 010600RJunXX End: 061200RJunXX		C. Date Prepared:  22 May XX	
D. Prepared By (Rank, Last Name, Duty Position): 1LT Liz Sample, XO					
E. Task:	F. Identify Hazards:	G. Assess Hazards:	H. Develop Controls:	I. Determine Residual Risk:	J. Implement Controls:
Conduct convoy operations from Fort Chilly to Camp Yukon			<b>SAMPLE</b>		
K. Determine the overall mission/task risk level after controls are implemented (circle one):  <div style="display: flex; justify-content: space-around;"> <span>LOW (L)</span> <span>MODERATE (M)</span> <span>HIGH (H)</span> <span>EXTREMELY HIGH (E)</span> </div>					

**Figure 1-3. Completing Block E**

*Step 3.* Complete Block F ([Figure 1-4](#)). Block F is used to answer the when, what, why, and/or where of hazards.

- When? Identify hazards during mission analysis.
- What? Define hazards as actual or potential. A hazard is an action that will cause (1) injury, illness, or death of personnel; (2) damage or loss of equipment or property; or (3) degradation of mission.
- Why? Promote stewardship by identifying actions that have potential to pollute, create negative effects, or degrade resources.
- Where? Identify the area(s) from [Table 1-2](#) that may be involved.

<b>A. Mission or Task:</b> 586th Engineer Company (AFB)		<b>B. Date/Time Group</b> Begin: 010600RJunXX End: 061200RJunXX		<b>C. Date Prepared:</b> 22 May XX	
<b>D. Prepared By (Rank, Last Name, Duty Position):</b> 1LT Liz Sample, XO					
<b>E. Task:</b>	<b>F. Identify Hazards:</b>	<b>G. Assess Hazards:</b>	<b>H. Develop Controls:</b>	<b>I. Determine Residual Risk:</b>	<b>J. Implement Controls:</b>
Conduct convoy operations from Fort Chilly to Camp Yukon	Spills during refueling stops:		<div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 48pt; font-weight: bold;">SAMPLE</div>		
<b>K. Determine the overall mission/task risk level after controls are implemented (circle one):</b> <div style="text-align: center;">           LOW (L)      MODERATE (M)      HIGH (H)      EXTREMELY HIGH (E)         </div>					

**Figure 1-4. Completing Block F**



AREA	COMMON ENVIRONMENTAL HAZARDS
Air	Equipment exhaust Convoy dust Range fires Open-air burning Pyrotechnics/smoke pots/smoke grenades Part-washer emissions Paint emissions Air-conditioner/refrigeration chlorofluorocarbons (CFCs) HM/HW release
Archeological/ cultural	Maneuvers in sensitive areas Sensitive-area digging Artifact disturbance or removal Demolition/munitions effects HM/HW spills Sonic booms/prop wash (The stream of air pushed back by a revolving aircraft propeller.)
Noise	Low-flying aircraft (helicopters) Demolition/munitions effects Nighttime operations Operations near post/camp boundaries and civilian populace Vehicle convoys/maneuvers Large-scale exercises
Threatened/ endangered species	Maneuvers in sensitive areas Demolition/munition effects (especially during breeding seasons) Habitat or individual-species disturbance HM/HW spills or releases Poor field sanitation Improper cutting of vegetation Damage to coral reefs
Soil (terrain)	Overuse of maneuver areas Demolition/munition effects Range fires Poor field sanitation Poor maneuver-damage control Erosion Troop-construction effects Refueling operations HM/HW spills Maneuvers in ecologically sensitive areas (wetlands or tundra)
Water	Refueling operations near water sources HM/HW spills Erosion and unchecked drainage Amphibious/water-crossing operations Troop-construction effects Poor field sanitation Unapproved vehicle-washing sites

**Table 1-2. Common environmental hazards**

Step 4. Complete Block G ([Figure 1-5](#)). Completion of this block requires two procedures. First, determine the probability ( [Table 1-3](#)) and the severity ([Table 1-4](#)) of the hazard. For the purpose of this instruction, the probability of a spill is occasional with marginal severity. Second, assess the hazard based on the probability and the severity using the risk-assessment matrix ([Figure 1-6](#)). Record the risk category in Block G.

A. Mission or Task: 586th Engineer Company (AFB)		B. Date/Time Group Begin: 010600RJunXX End: 061200RJunXX		C. Date Prepared: 22 May XX	
D. Prepared By (Rank, Last Name, Duty Position): 1LT Liz Sample, XO					
E. Task:	F. Identify Hazards:	G. Assess Hazards:	H. Develop Controls:	I. Determine Residual Risk:	J. Implement Controls:
Conduct convoy operations from Fort Chilly to Camp Yukon	Spills during refueling stops	Moderate (M)	<b>SAMPLE</b>		
K. Determine the overall mission/task risk level after controls are implemented (circle one):					
<div>LOW (L)</div> <div>MODERATE (M)</div> <div>HIGH (H)</div> <div>EXTREMELY HIGH (E)</div>					

**Figure 1-5. Completing Block G**

<b>FREQUENT (A): Occurs very often; continuously experienced.</b>	
Single item	Occurs very often in service life. Expected to occur several times over duration of a specific mission or operation. Always occurs.
Fleet or inventory of items	Occurs continuously during a specific mission or operation or over service life.
Individual soldier	Occurs very often in career. Expected to occur several times during mission or operation. Always occurs.
All soldiers exposed	Occurs continuously during a specific mission or operation.
<b>LIKELY (B): Occurs several times.</b>	
Single item	Occurs several times in service life. Expected to occur during a specific mission or operation.
Fleet or inventory of items	Occurs at a high rate but experienced intermittently (regular intervals, generally often).
Individual soldier	Occurs several times in career. Expected to occur during a specific mission or operation.
All soldiers exposed	Occurs at a high rate but experienced intermittently.
<b>OCCASIONAL (C): Occurs sporadically.</b>	
Single item	Occurs sometime in service life. May occur about as often as not during a specific mission or operation.
Fleet or inventory of items	Occurs several times in service life.
Individual soldier	Occurs sometime in career. May occur during a specific mission or operation but not often.
All soldiers exposed	Occurs sporadically (irregularly, sparsely, or sometimes).
<b>SELDOM (D): Remotely possible; could occur at sometime.</b>	
Single item	Occurs in service life but only remotely possible. Not expected to occur during a specific mission or operation.
Fleet or inventory of items	Occurs as an isolated incident. Possible to occur sometime in service life but rarely. Usually does not occur.
Individual soldier	Occurs as an isolated incident during a career. Remotely possible but not expected to occur during a specific mission or operation.
All soldiers exposed	Occurs rarely within exposed population as isolated incidents.
<b>UNLIKELY (E): Can assume will not occur, but not impossible.</b>	
Single item	Occurs very rarely but not impossible. May assume will almost never occur in service life. May assume will not occur during a specific mission or operation.
Fleet or inventory of items	Occurs very rarely (almost never or improbable). Incidents may occur over service life.
Individual soldier	Occurs very rarely but not impossible. May assume will not occur in career or during a specific mission or operation.
All soldiers exposed	Occurs very rarely but not impossible.

**Table 1-3. Hazard probability**

<b>Catastrophic (I)</b>	Loss of ability to accomplish the mission, mission failure, death or permanent total disability (accident risk), loss of major or mission-critical system or equipment, major property (facility) damage, severe environmental damage, mission-critical security failure, or unacceptable collateral damage.
<b>Critical (II)</b>	Significantly (severely) degraded mission capability or unit readiness, permanent partial disability, temporary total disability exceeding three months time (accident risk), extensive (major) equipment or system damage, significant property or environmental damage, security failure, or significant collateral damage.
<b>Marginal (III)</b>	Degraded mission capability or unit readiness; minor equipment, system, property, or environmental damage; lost day due to injury or illness not exceeding three months (accident risk); or minor property or environmental damage.
<b>Negligible (IV)</b>	Little or no adverse impact on mission capability, first aid or minor medical treatment (accident risk), slight equipment or system damage but fully functional and serviceable, or little or no property or environmental damage.

**Table 1-4. Hazard severity**

SEVERITY	PROBABILITY				
	Frequent (A)	Likely (B)	Occasional (C)	Seldom (D)	Unlikely (E)
Catastrophic (I)	E	H	H	H	M
Critical (II)	E	H	H	M	L
Marginal (III)	H	M	M	L	L
Negligible (IV)	M	L	L	L	L

**Risk Category**

**Extremely High (E)**

Mission failure if hazardous incidents occur during the mission. Frequent or likely probability of catastrophic loss (IA or IB) or frequent probability of critical loss (IIA).

**High (H)**

Significantly degraded mission capabilities in terms of required mission standard, inability to accomplish all parts of the mission, or inability to complete the mission to standard if hazards occur during the mission. Occasional to seldom probability of catastrophic loss (IC or ID). Likely to occasional probability of critical loss (IIB or IIC) with material and soldier system. Frequent probability of marginal loss (IIIA).

**Moderate (M)**

Expected degraded mission capabilities in terms of the required mission standard. Reduced mission capability if hazards occur during the mission. Unlikely probability of catastrophic loss (IE). Seldom probability of critical loss (IID). Likely or occasional probability of marginal loss (IIIB or IIIC). Frequent probability of negligible loss (IIVA).

**Low (L)**

Expected losses that have little or no impact on mission accomplishment. Unlikely probability of critical loss (IIE). Seldom to unlikely probability of marginal loss (IIID or IIIE). Likely to unlikely probability of negligible loss (IVB to IVE)

**Figure 1-6. Risk-assessment matrix**

*Step 5.* Complete Block H ([Figure 1-7](#)). In the initial operations briefing, the commander may provide guidance on the acceptable level of risk for a task. If that guidance is provided, platoon leaders must become very creative in identifying controls that will keep the risk within the identified level. Platoon leaders will then develop one or more controls for each hazard. The goal is to eliminate or reduce the risk (probability and/or severity) of a hazardous incident. Specify who, what, where, when, and how for each control. Three criteria for selecting controls are:

- **Suitability.** The control must remove the hazard or reduce the residual risk to an acceptable level.
- **Feasibility.** The platoon must have the capability to implement the controls.
- **Acceptability.** The benefits gained by implementing the controls must justify the cost in resources and time.

Educational-, physical-, or avoidance-type controls can be used ([Table 1-5](#)). Educational-type controls are based on knowledge and skill and are implemented through individual and collective training. Physical-type controls use physical items to mitigate a hazard. Avoidance-type controls relate to eliminating the hazard by changing a planned action. The assessment of acceptability is largely subjective.

<b>A. Mission or Task:</b> 586th Engineer Company (AFB)		<b>B. Date/Time Group</b> Begin: 010600RJunXX End: 061200RJunXX		<b>C. Date Prepared:</b> 22 May XX	
<b>D. Prepared By (Rank, Last Name, Duty Position):</b> 1LT Liz Sample, XO					
<b>E. Task:</b>	<b>F. Identify Hazards:</b>	<b>G. Assess Hazards:</b>	<b>H. Develop Controls:</b>	<b>I. Determine Residual Risk:</b>	<b>J. Implement Controls:</b>
Conduct convoy operations from Fort Chilly to Camp Yukon	Spills during refueling stops	Moderate (M)	1. Train all fuel handlers on proper refueling procedures. 2. Provide spill equipment. 3. Ensure that only fuel handlers will dispense fuel. 4. Locate refueling sites away from bodies of water and wetland areas.	<b>SAMPLE</b>	
<b>K. Determine the overall mission/task risk level after controls are implemented (circle one):</b> LOW (L)      MODERATE (M)      HIGH (H)      EXTREMELY HIGH (E)					

**Figure 1-7. Completing Block H**

Control Type	Environmental-Related Examples
Educational	<ul style="list-style-type: none"> <li>Conducting unit environmental-awareness training</li> <li>Conducting an environmental briefing before deployment</li> <li>Performing tasks to environmental standards</li> <li>Reviewing environmental considerations in AARs</li> <li>Reading the unit's environmental SOPs and policies</li> <li>Conducting spill-prevention training</li> <li>Publishing an environmental annex/appendix to the OPOD/operation plan (OPLAN)</li> </ul>
Physical	<ul style="list-style-type: none"> <li>Providing spill-prevention equipment</li> <li>Establishing a field trash-collection point and trash-collection procedures</li> <li>Establishing a field satellite-accumulation site and satellite-accumulation procedures</li> <li>Policing field locations</li> <li>Practicing good field sanitation</li> <li>Filling in fighting positions</li> <li>Posting signs and warnings for off-limit areas</li> </ul>
Avoidance	<ul style="list-style-type: none"> <li>Maneuvering around historical/cultural sites</li> <li>Establishing refueling and maintenance areas away from wetlands and drainage areas</li> <li>Crossing streams at approved sites</li> <li>Preventing pollution</li> <li>Limiting noise in endangered- and threatened-species habitats</li> <li>Avoiding refueling over water sources</li> <li>Curtailing use of live vegetation for camouflage</li> </ul>

**Table 1-5. Environmental-related controls**

*Step 6.* Complete Block I ([Figure 1-8](#)). Based on identified controls (Block H) being implemented, reassign the risk (Block I) by repeating the probability ([Table 1-3](#)) and the severity ([Table 1-4](#)) of each hazard identified in Block F.



<b>A. Mission or Task:</b> 586th Engineer Company (AFB)		<b>B. Date/Time Group</b> Begin: 010600RJunXX End: 061200RJunXX		<b>C. Date Prepared:</b> 22 May XX	
<b>D. Prepared By (Rank, Last Name, Duty Position):</b> 1LT Liz Sample, XO					
<b>E. Task:</b>	<b>F. Identify Hazards:</b>	<b>G. Assess Hazards:</b>	<b>H. Develop Controls:</b>	<b>I. Determine Residual Risk:</b>	<b>J. Implement Controls:</b>
Conduct convoy operations from Fort Chilly to Camp Yukon	Spills during refueling stops	Moderate (M)	1. Train all fuel handlers on proper refueling procedures. 2. Provide spill equipment. 3. Ensure that only fuel handlers will dispense fuel. 4. Locate refueling sites away from bodies of water and wetland areas.	Low (L)	SAMPLE
<b>K. Determine the overall mission/task risk level after controls are implemented (circle one):</b> <div style="display: flex; justify-content: space-around; width: 100%;"> <span>LOW (L)</span> <span>MODERATE (M)</span> <span>HIGH (H)</span> <span>EXTREMELY HIGH (E)</span> </div>					

**Figure 1-8. Completing Block I**

*Step 7.* Complete Block J ([Figure 1-9](#)). Describe how to implement the controls identified in Block H. Identify the who, what, where, when, and how of each control. Implement controls by informing subordinates (down to individual soldier level) of the risk-control measures to be implemented. State how each control will be implemented and assign responsibility. Anticipate the requirements to implement the controls and incorporate the requirements as part of long-range, short-range, and near-term planning. Ensure that controls are coordinated and communicated by integrating the controls into verbal guidance, OPORDs, and SOPs. Schedule and resource training that support the controls and incorporate the use of controls into AARs and lessons learned.



<b>A. Mission or Task:</b> 586th Engineer Company (AFB)		<b>B. Date/Time Group</b> Begin: 010600RJunXX End: 061200RJunXX		<b>C. Date Prepared:</b> 22 May XX	
<b>D. Prepared By (Rank, Last Name, Duty Position):</b> 1LT Liz Sample, XO					
<b>E. Task:</b>	<b>F. Identify Hazards:</b>	<b>G. Assess Hazards:</b>	<b>H. Develop Controls:</b>	<b>I. Determine Residual Risk:</b>	<b>J. Implement Controls:</b>
Conduct convoy operations from Fort Chilly to Camp Yukon	Spills during refueling stops	Moderate (M)	1. Train all fuel handlers on proper refueling procedures. 2. Provide spill equipment. 3. Ensure that only fuel handlers will dispense fuel. 4. Locate refueling sites away from bodies of water and wetland areas.	Low (L)	TACSOP, paragraph 11(a), OPORD. The support platoon leader will check the status of spill equipment before the convoy operations begin and will brief all soldiers on refueling procedures.
<b>K. Determine the overall mission/task risk level after controls are implemented (circle one):</b> <div style="display: flex; justify-content: space-around; text-align: center;"> <span>LOW (L)</span> <span>MODERATE (M)</span> <span>HIGH (H)</span> <span>EXTREMELY HIGH (E)</span> </div>					

**Figure 1-9. Completing Block J**

*Step 8.* Complete Block K ([Figure 1-10](#)). Complete Block K based on the entries in Block I. If more than one risk identified in Block I, determine an average of the overall risk and circle that level in Block K.

<b>A. Mission or Task:</b> 586th Engineer Company (AFB)		<b>B. Date/Time Group</b> Begin: 010600RJunXX End: 061200RJunXX		<b>C. Date Prepared:</b> 22 May XX	
<b>D. Prepared By (Rank, Last Name, Duty Position):</b> 1LT Liz Sample, XO					
<b>E. Task:</b>	<b>F. Identify Hazards:</b>	<b>G. Assess Hazards:</b>	<b>H. Develop Controls:</b>	<b>I. Determine Residual Risk:</b>	<b>J. Implement Controls:</b>
Conduct convoy operations from Fort Chilly to Camp Yukon	Spills during refueling stops	Moderate (M)  <b>SAMPLE</b>	1. Train all fuel handlers on proper refueling procedures. 2. Provide spill equipment. 3. Ensure that only fuel handlers will dispense fuel. 4. Locate refueling sites away from bodies of water and wetland areas.	Low (L)	TACSOP, paragraph 11(a), OPORD. The support platoon leader will check the status of spill equipment before the convoy operations begin and will brief all soldiers on refueling procedures.
<b>K. Determine the overall mission/task risk level after controls are implemented (circle one):</b> <div style="display: flex; justify-content: space-around; align-items: center;"> <span><input checked="" type="radio"/> LOW (L)</span> <span><input type="radio"/> MODERATE (M)</span> <span><input type="radio"/> HIGH (H)</span> <span><input type="radio"/> EXTREMELY HIGH (E)</span> </div>					

**Figure 1-10. Completing Block K**

**1-4. Risk-Management Principles.** Certain environmental principles guide a commander in day-to-day activities. Commanders use three risk-management principles to assist them in making environmental-risk decisions:

- Integrate risk management into mission planning, preparation, and execution.
- Make risk decisions at the appropriate level in the chain of command.
- Accept no unnecessary risk.

**1-5. Risk-Management Implementation.** The goal of environmental risk management is to ensure that battle-focused training is accomplished while at the same time preserving the environment. When platoon actions negatively impact the environment, appropriate steps must be taken to eliminate the damage. Platoon leaders are involved in the risk-management process and must set a good example by supporting the environmental program, identifying deficiencies, and taking action to correct any deficiencies. After the risk-management work sheet is completed, the commander uses the results to direct the activities of the unit. Managing environmental risk is a five-step process:

- Identify all environmental hazards.
- Assess the hazards to determine the risk category.

- Develop controls and make risk decisions.
- Implement the controls.
- Supervise and evaluate the risk-control measures.

Accomplish these five steps in the following manner:

*Step 1.* Identify all environmental hazards by completing Block F of the risk-management work sheet. Based on the identified operation, identify all of the actual or potential hazards in Block F.

*Step 2.* Assess the hazards to determine the risk category by completing Block G of the risk-management work sheet. Early in the planning process, the commander sometimes communicates the extent of risk he is willing to accept. That guidance indicates the maximum entry that he will accept in this block.

*Step 3.* Develop controls and make risk decisions on an acceptable level of risk. Regardless of the determined level of risk (Block G), controls should be sought (Block H). The commander will review the calculations on the work sheet and decide if the calculated level of residual risk (Block I) is acceptable. The commander may choose to continue the mission and accept the level of risk that is involved. The commander may determine that the risk is too great to continue the mission and may direct additional controls or modify, change, or reject the mission or course of action (COA). The commander is ultimately responsible for the actions of those in his command and, therefore, must feel comfortable with the outcome.

*Step 4.* Implement the controls. Inform all subordinates of the risk-control measures (State how each control will be implemented and assign responsibility.). Include educational controls in long-range, short-range, and near-term training plans. Coordinate and communicate the controls by including them in the OPORD, SOPs, and other related activities.

*Step 5.* Supervise and evaluate the risk-control measures by monitoring the rehearsal and execution of the mission. Ensure that standards are enforced. The more trained the soldier, the less detailed the supervision must be. Evaluate the performance and include the outcome in AARs and lessons learned.

**1-6. Summary.** Platoon leaders are responsible for providing the commander with an accurate picture of the platoon's actions. This lesson explained the process for completing a risk-management work sheet to assist in accomplishing this requirement.

---

## LESSON 1

### PRACTICE EXERCISE

**Instructions** The following items will test your understanding of the material covered in this lesson. There is only one correct answer for each item. When you have completed the exercise, check your answers with the answer key that follows. If you answer any item incorrectly, review that part of the lesson which contains the portion involved.

1. You have been assigned to a new installation. Where can you get specific environmental laws and regulations for this location?
  - ☐ A. County health office
  - ☐ B. Adjutant General
  - ☐ C. Health Services Command
  - ☐ D. Installation environmental office
2. Refer to the sample risk-management work sheet in [Figure PE 1-1](#). To identify hazards, which of the following questions would you answer?
  - ☐ A. How much?
  - ☐ B. When, what, why, and where?
  - ☐ C. Actual or potential?
  - ☐ D. What kind?
3. Refer to the sample risk-management work sheet in [Figure PE 1-1](#). Block F identifies one hazard as "Maneuver damage from off-road movement." Which of the following areas could be affected by this hazard?
  - ☐ A. Threatened/endangered species
  - ☐ B. Air
  - ☐ C. Noise
  - ☐ D. HW
4. Refer to the sample risk-management work sheet in [Figure PE 1-1](#). Completion of Block G requires two procedures. First, determine the probability and \_\_\_\_\_ of the hazard.
  - ☐ A. quality
  - ☐ B. avoidance
  - ☐ C. severity
  - ☐ D. quantity

A. Mission or Task: 586th Engineer Company (AFB)		B. Date/Time Group Begin: 010600RJunXX End: 061200RJunXX		C. Date Prepared: 22 May XX	
D. Prepared By: (Rank, Last Name, Duty Position) 1LT Elizabeth Young, XO					
E. Task:	F. Identify Hazards:	G. Assess Hazards:	H. Develop Controls:	I. Determine Residual Risk:	J. Implement Controls ("How To"):
Conduct convoy operations from Fort Chilly to Camp Yukon	Vehicle accidents and breakdowns causing spill of fuel and HM	Moderate (M)	1. Train all drivers on proper operations during a spill 2. Provide spill equipment	Low (L)	TACSOP, para 8(a), OPORD - train all drivers before the exercise. Supply NCO will order and issue vehicle spill equipment. Platoon leaders will brief all soldiers before the convoy. (ARTEP 5-145-32, MTP 05-2-1030)
	Spills during refueling stops	Moderate (M)	1. Train all drivers on proper refueling procedures 2. Provide spill equipment 3. Ensure that only fuel handlers will dispense 4. Locate refueling sites away from bodies of water and wetland areas	Low (L)	TACSOP, para 11(a), OPORD - support platoon leader will check status of spill equipment and brief all soldiers before the convoy on refueling procedures. (FM 10-71, FM 20-400, ARTEP 5-145-32, MTP 05-2-1024)
	Maneuver damage from off-road movement	Moderate (M)	1. Brief all drivers to stay on primary and secondary roads 2. Identify all sensitive areas and habitat along the route 3. Conduct prior route recon	Low (L)	TACSOP, para 9(a), OPORD - provide all drivers with strip map marking route and sensitive areas; leaders account for all vehicles at halts. (ARTEP 5-145-32, MTP 05-2-1030)
K. Determine overall mission/task risk level after controls are implemented (circle one): <div style="display: flex; justify-content: space-around;"> <span>LOW (L)</span> <span>MODERATE (M)</span> <span>HIGH (H)</span> <span>EXTREMELY HIGH (E)</span> </div>					

Figure PE 1-1. Sample risk-management work sheet

5. Refer to the sample risk-management work sheet in [Figure PE 1-1](#) and the risk-assessment matrix in [Figure 1-6](#). Assume that you must assess the hazard for an action that is seldom done and has critical consequences. Identify the Block G entry for this action.
  - ☐ A. Extremely high
  - ☐ B. High
  - ☐ C. Moderate
  - ☐ D. Low
6. The \_\_\_\_\_ will accept or reject the residual risk as calculated on the risk-management work sheet.
  - ☐ A. environmental officer
  - ☐ B. squad leader
  - ☐ C. platoon leader
  - ☐ D. commander

7. The \_\_\_\_\_ identifies environmental deficiencies and takes action to correct deficiencies that are outlined on the risk-management work sheet?
- ☐ A. environmental officer
  - ☐ B. squad leader
  - ☐ C. platoon leader
  - ☐ D. commander

## PRACTICE EXERCISE

### ANSWER KEY

1. You have been assigned to a new installation. Where can you get specific environmental laws and regulations for this location?
  - A. County health office
  - B. Adjutant General
  - C. Health Services Command
  - D. Installation environmental office
2. Refer to the sample risk-management work sheet in Figure PE 1-1. To identify hazards, which of the following questions would you answer?
  - A. How much?
  - B. When, what, why, and where?
  - C. Actual or potential?
  - D. What kind?
3. Refer to the sample risk-management work sheet in Figure PE 1-1. Block F identifies one hazard as "Maneuver damage from off-road movement." Which of the following areas could be affected by this hazard?
  - A. Threatened/endangered species
  - B. Air
  - C. Noise
  - D. HW
4. Refer to the sample risk-management work sheet in Figure PE 1-1. Completion of Block G requires two procedures. First, determine the probability and \_\_\_\_\_ of the hazard.
  - A. quality
  - B. avoidance
  - C. severity
  - D. quantity
5. Refer to the sample risk-management work sheet in Figure PE 1-1 and the risk-assessment matrix in Figure 1-6. Assume that you must assess the hazard for an action that is seldom done and has critical consequences. Identify the Block G entry for this action.
  - A. Extremely high
  - B. High
  - C. Moderate

D. Low

6. The \_\_\_\_\_ will accept or reject the residual risk as calculated on the risk-management work sheet.

A. environmental officer

B. squad leader

C. platoon leader

D. commander

7. The \_\_\_\_\_ identifies environmental deficiencies and takes action to correct deficiencies that are outlined on the risk-management work sheet?

A. environmental officer

B. squad leader

C. platoon leader

D. commander

---



## LESSON 2

### ENVIRONMENTAL SELF-ASSESSMENT

Critical Task: 051-250-1002

#### OVERVIEW

##### LESSON DESCRIPTION:

This lesson addresses the use of a platoon-level environmental self-assessment.

##### TERMINAL LEARNING OBJECTIVE:

**ACTION:** You will learn how to inspect a platoon's compliance with environmental regulations.

**CONDITION:** You will be given the material contained in this lesson.

**STANDARD:** You will correctly answer all practice-exercise questions at the end of the lesson.

**REFERENCE:** The material contained in this lesson was derived from FM 20-400.

#### INTRODUCTION

Platoon actions can negatively impact the environment. When negative impacts are identified, appropriate steps must be taken to eliminate the damage.

**2-1. Platoon Leaders' Responsibilities.** When completion of a risk-management work sheet indicates that the platoon has some major environmental problems, an overall evaluation of the status of the platoon's compliance with laws and regulations is needed. This lesson addresses the protection of the environment during all activities (Item 6 from [Table 1-1](#)).

**2-2. Platoon Compliance.** There are several methods that can be used to determine a platoon's compliance:

a. Compliance can only be determined conclusively by a state or federal regulatory agency such as the United States (US) Environmental Protection Agency (EPA) or the US Fish and Wildlife Service. These organizations have the legal right and responsibility to inspect a platoon's activities. Regulatory inspections are normally coordinated with the installation's environmental office but are sometimes conducted without notice. Inspections may concentrate on a particular area such as HW management. However, there is a recent trend toward multiarea inspections. This type of inspection is performed on several environmental protocols simultaneously, such as HW, water, and air. Inspections may include a variety of areas to include personnel training records and the documentation of required training. Guidelines for frequency of inspections are established under the EPA Federal Facility Compliance Act. If a formal inspection by a regulatory agency uncovers major problems within a unit, frequent follow-up inspections can be expected.

b. The Environmental Compliance Assessment System (ECAS) is a process for self-evaluation. It was established as a means of achieving, maintaining, and monitoring self-compliance. Many environmental regulations are designed to be self-regulating. ECAS requires a facility to

monitor its programs and notify the chain of command if the facility is out of compliance. The assessment program looks at training, planning, programming, researching, correcting past deficiencies, preventing pollution, managing natural resources, and meeting regulatory requirements for emissions. Units must conduct internal compliance assessments in support of facility programs. Units use compliance assessments as a vehicle to attain environmental program goals and to improve program visibility. By law, if a platoon handles HW/HM, it is required to conduct internal inspections. A HW management plan contains an inspection plan for HW generation points and accumulation sites at the platoon level. The local environmental office can provide an ECAS protocol or ECAS checklists for conducting an internal self-assessment.

c. Platoon self-assessment provides a first-level evaluation of compliance. The self-assessment process addresses nine areas of environmental compliance. Appendix I of FM 20-400 shows a generic checklist for leaders to assess the state of their unit's environmental program and the unit's compliance with environmental laws and regulations (see [Appendix C](#)).

**2-3. Environmental Self-Assessment.** Before starting a self-assessment, review the checklist and supplement it with host-nation, federal, state, and local environmental laws and regulations. Check with higher headquarters for similar aids designed for specific units or locations, and if possible, obtain a copy of the last ECAS inspection from higher headquarters. The nine areas of the environmental self-assessment are discussed below:

a. Management. Many environmental requirements at the unit level are simply extensions of existing management practices. The most basic is ordering only enough supplies to do the job and not stockpiling. The presence of HM makes this practice even more important. HM disposal is expensive and carries with it a significant administrative burden. Good housekeeping is another basic management practice. This involves a number of activities in maintenance, operations, and training.

b. Accumulation Sites. Accumulation sites must be provided for used petroleum products and HW. These sites will be placed above the ground on a nonpermeable, bermed, hard surface; labeled; and located 50 feet or more from any building. Leaking, corroding, or otherwise deteriorating containers must be overpacked in drums approved by the Department of Transportation (DOT).

c. Hazardous Materials/Hazardous Wastes. A motor pool is a unique environmental concern. Mechanics lubricate, service, and repair equipment that generates HW. Motor-pool personnel should—

- Requisition only the minimum amount of HM needed. Substitute nonhazardous material when possible.
- Practice inventory control of all HM/HW by monitoring HM shelf life, practicing first-in/first-out rotation, and tracking HW accumulation start dates. Tracking HW accumulation helps manage prompt transportation of HW.
- Store HM/HW in approved containers and areas.

- Maintain a material safety data sheet (MSDS) on each HM used.
- Obtain any necessary permits.
- Recommend changes when it is believed that there is a better way of accomplishing the job.

d. Solid-Waste Management. Disposal of solid waste is a problem faced by military units worldwide. Proper disposal of solid waste (a category which includes HW) is essential. Improper handling of waste can lead to penalties based on the laws governing the location ([Table 2-1](#)).

Continental United States (CONUS)	Outside Continental United States (OCONUS)
Civil and criminal charges (fines and imprisonment)	Uniform Code of Military Justice (UCMJ)
UCMJ	

**Table 2-1. Environmental-related penalties**

e. Spill Prevention. Army policy, as well as federal law, requires units to apply spill-prevention measures for oil and hazardous substances and to respond promptly to contain and clean up any spills that may occur. These regulations prohibit any discharge of oil or hazardous substance from installation vehicles, aircraft, or watercraft into the environment without a discharge permit. During deployments, the deployment order directs spill-prevention and response procedures. During contingency operations or combat, spill-prevention and response procedures become a matter of host-nation or theater guidance and unit SOPs.

f. Recycling Program. A recycling program is one of the most visible and potentially cost-effective areas of any platoon environmental program. For example, recycling through reuse (used oil recycled-for energy recovery) is the most efficient method of recycling. This method allows for the consumption of used oil for the production of heat rather than paying for both the heating oil and the disposal of the used oil.

g. Washracks. Runoff from washracks is often a major source of water pollution and should only drain into treated sewer systems. Inspect washracks frequently. How often the washrack needs to be checked depends on how frequently it is used. Proper washrack maintenance is a crucial pollution-prevention opportunity, which should not be missed.

h. Land Management. Training land is a valuable resource. When stripped of vegetation, filled with holes, and littered with debris, it ceases to support realistic training. Ensuring that the platoon follows good land-management practices also ensures that training land will continue to be available.

i. Local Supplemental Requirements. Identify applicable installation and area-of-operation policies and procedures that assist the unit in complying with state and local environmental laws and regulations. Modify the generic checklist to include these procedures. Seek assistance from the commander and the installation environmental coordinator when modifying the checklist.

**2-4. Follow-Up Action.** When the self-assessment checklist is complete, the first-line supervisor can initiate corrective actions. Any item that receives a "no" should be addressed. The first-line supervisor should develop a plan to correct those issues and present the plan to the company commander.

**2-5. Summary.** This lesson discussed the evaluation of platoon-level environmental compliance. The lesson included the format and use of an environmental self-assessment.

## LESSON 2

### PRACTICE EXERCISE

**Instructions** The following items will test your understanding of the material covered in this lesson. There is only one correct answer for each item. When you have completed the exercise, check your answers with the answer key that follows. If you answer any item incorrectly, review that part of the lesson which contains the portion involved.

1. Platoon self-assessment provides a \_\_\_\_\_ evaluation of environmental compliance.
  - ☐ A. follow-up
  - ☐ B. first-level
  - ☐ C. final
  - ☐ D. formal
2. The self-assessment process addresses nine areas of environmental compliance. One of those areas is \_\_\_\_\_.
  - ☐ A. recycling
  - ☐ B. maintenance
  - ☐ C. supplies
  - ☐ D. training
3. Refer to the portion of the unit environmental self-assessment shown in [Figure PE 2-1](#). Item number(s) \_\_\_\_\_ require(s) action.
  - ☐ A. 1 and 5
  - ☐ B. 2, 3, 4, and 6
  - ☐ C. 2, 3, and 4
  - ☐ D. 1

YES	NO	V.	Spill Prevention
	X	1.	Is the unit spill-prevention plan present? Is it understood and being followed?
X		2.	Are oil, fuel, battery-acid, hydraulic-oil, or other HM spills properly reported?
X		3.	Does the unit enforce prohibitions against discharging pollutants into storm or washrack drains or pouring pollutants on the ground or along fence lines?
X		4.	Are small oil spills cleaned up promptly and effectively?
	X	5.	Are drip pans used under vehicles, equipment, and spigots on barrels of petroleum, oil, and lubricants (POL) where spills are likely to occur?
X		6.	Is contaminated soil properly disposed of at a designated, authorized disposal area?

**Figure PE 2-1. Portion of a unit environmental self-assessment**

## PRACTICE EXERCISE

### ANSWER KEY

1. Platoon self-assessment provides a \_\_\_\_\_ evaluation of environmental compliance.  
  - A. follow-up
  - [B. first-level](#)
  - C. final
  - D. formal
2. The self-assessment process addresses nine areas of environmental compliance. One of those areas is \_\_\_\_\_.  
  - [A. recycling](#)
  - B. maintenance
  - C. supplies
  - D. training
3. Refer to the portion of the unit environmental self-assessment shown in Figure PE 2-1. Item number(s) \_\_\_\_\_ require(s) action.  
  - [A. 1 and 5](#)
  - B. 2, 3, 4, and 6
  - C. 2, 3, and 4
  - D. 1

## LESSON 3

### ENVIRONMENTAL TRAINING

Critical Task: 051-250-1002

#### OVERVIEW

##### LESSON DESCRIPTION:

This lesson identifies what to do when an environmental risk is correctable with training. FM 20-400 identifies sources for environmental training.

##### TERMINAL LEARNING OBJECTIVE:

- ACTION:** You will learn how to integrate environmental considerations into the platoon's mission.
- CONDITION:** You will be given the material contained in this lesson.
- STANDARD:** You will correctly answer all practice-exercise questions at the end of this lesson.
- REFERENCES:** The material contained in this lesson was derived from FM 20-400 and [TC 25-30](#).

#### INTRODUCTION

Integrating environmental awareness and ethic at every available opportunity is very important. Training is one method used to integrate environmental awareness and ethic to eliminate environmental damage. When training needs are identified, they must be incorporated into the unit's training plan as appropriate. The training is entered into the training-management cycle. This lesson addresses communicating the Army's environmental ethic to subordinates while training them to be good environmental stewards (Item 2 from [Table 1-1](#)).

**3-1. Platoon Leaders' Responsibilities.** Platoon leaders must bring focus and direction to environmental protection. Programs that are in place at installation and unit levels require support from the platoon. Leaders must ensure that personnel are properly trained to support the organizational requirements. See [Tables 3-1](#) and [3-2](#) for training phases and requirements at platoon and company levels.

Action	Time
Long-range plan	Projected 12 to 36 months
Short-range plan	Horizon of 3 months
Near-term plan	4 to 6 weeks before mission execution
Training execution	Present
Training evaluation	AAR

**Table 3-1. Phases in the training-management cycle**



Platoon Leader	Platoon Sergeant
Assesses training proficiency of collective tasks	Assesses and evaluates the training proficiency of individual soldier tasks
Plans training	Plans training
Evaluates trainers' rehearsals	Selects individual soldier training tasks
Evaluates leader, team, and crew-level collective training	Selects opportunity training
Conducts platoon training meetings	Provides input to the platoon leader's collective-task assessment
	Assigns trainers
	Evaluates trainers' rehearsals
	Conducts preexecution checks
	Ensures that soldiers are prepared for and attend training

**Table 3-2. Training requirements for platoon leaders**

**3-2. Integration of Environmental Considerations.** Environmental protection requires planning that encompasses environmental requirements at operational and support levels. Operational planning includes consideration of information provided in the form of staff estimates, protection requirements, and environmental baseline surveys (EBSs). Staffs integrate environmental protection into planning for larger units. Unit planning includes consideration of SOPs, risk assessments, plans, orders, and training requirements.

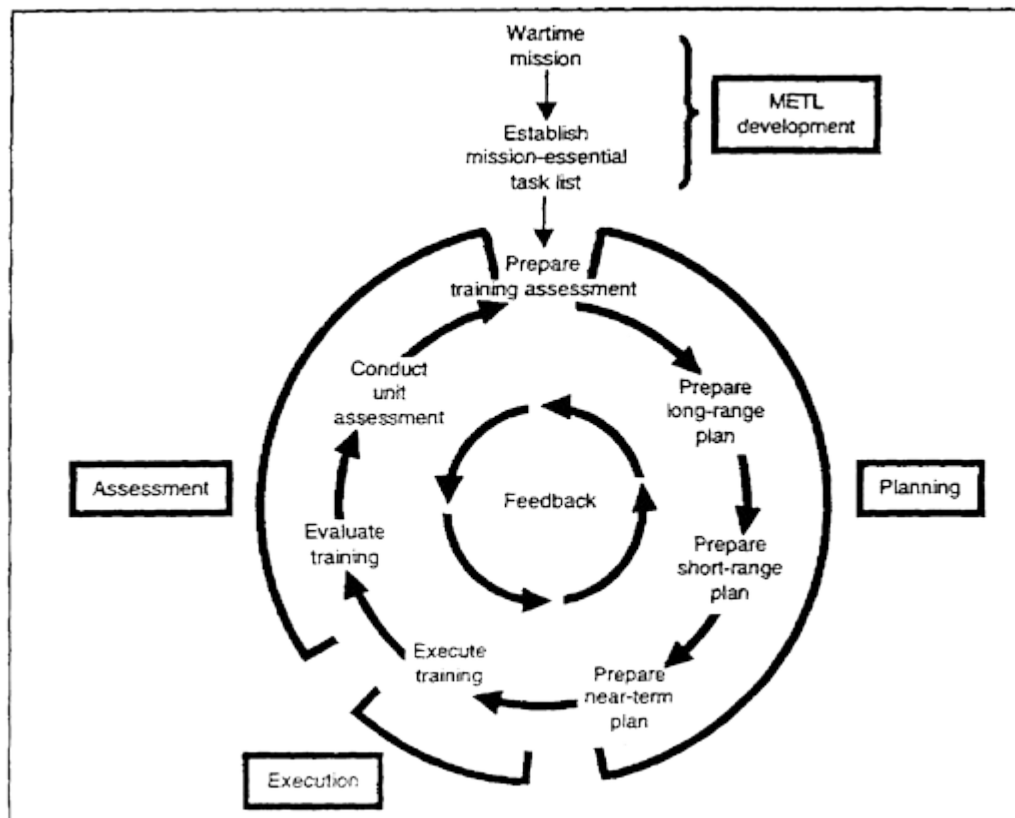
- a. SOPs reflect environmental considerations for each task and activity, and they inform soldiers how to accomplish tasks in an environmentally sound manner. SOPs address environmental-protection requirements for all activities (facility operations, field operations, deployment, and combat). They must be updated to incorporate local requirements.
- b. Risk assessments are completed as unit plan for operations or activities. Platoon leaders must ensure that environmental risk assessments are also completed for activities not previously addressed in a SOP. Risk assessments are performed when relocating to a new location (in garrison or field conditions) to determine what changes need to be made to the SOP. Risk assessments apply to garrison and field operations.
- c. Environmental protection is addressed in plans and orders (operations, warning, or fragmentary). It is the responsibility of the engineer coordinator (ENCORD) to develop an engineer annex to the order. The ENCORD does this with input from the brigade staff. Leaders seldom develop an environmental appendix to the engineer annex. Instead, they include environmental information in the "execution" or "service-support" paragraph of the engineer annex. Platoon leaders obtain environmental information from the "coordinating-instruction" subparagraph of the execution paragraph. Platoon leaders must inform the soldiers of any unique environmental-protection measures.
- d. Unit leaders must consider the environmental impact of their unit's actions, and they must plan to eliminate or minimize any negative effects. Unit leaders can incorporate environmental training issues into long-range, short-range, and near-term training-management cycles. Platoon

leaders ensure that training requirements are incorporated into long-range, short-range, and near-term training plans so that environmental risks are controlled or eliminated without sacrificing essential mission requirements. Platoon leaders then enforce training measures during unit training.

**3-3. Platoon Leaders' Training Procedures.** When deficiencies can be corrected with training, platoon leaders initiate the training using the process shown in [Tables 3-1](#) and [3-2](#). Training requirements can be identified and submitted for consideration during long-range, short-range, and near-term planning cycles as shown in [Figure 3-1](#).

a. Long-Range Planning. The following actions should be accomplished during the long-range planning cycle.

- Assess mission requirements and platoon capabilities.
- Review environmental risk assessments and unit SOPs.
- Provide the proper equipment to prevent or mitigate environmental damage.
- Organize training meetings to discuss environmental considerations and to develop methods to overcome identified issues.



**Figure 3-1. Training-management cycle**

b. Short-Range Planning. During the short-range planning cycle

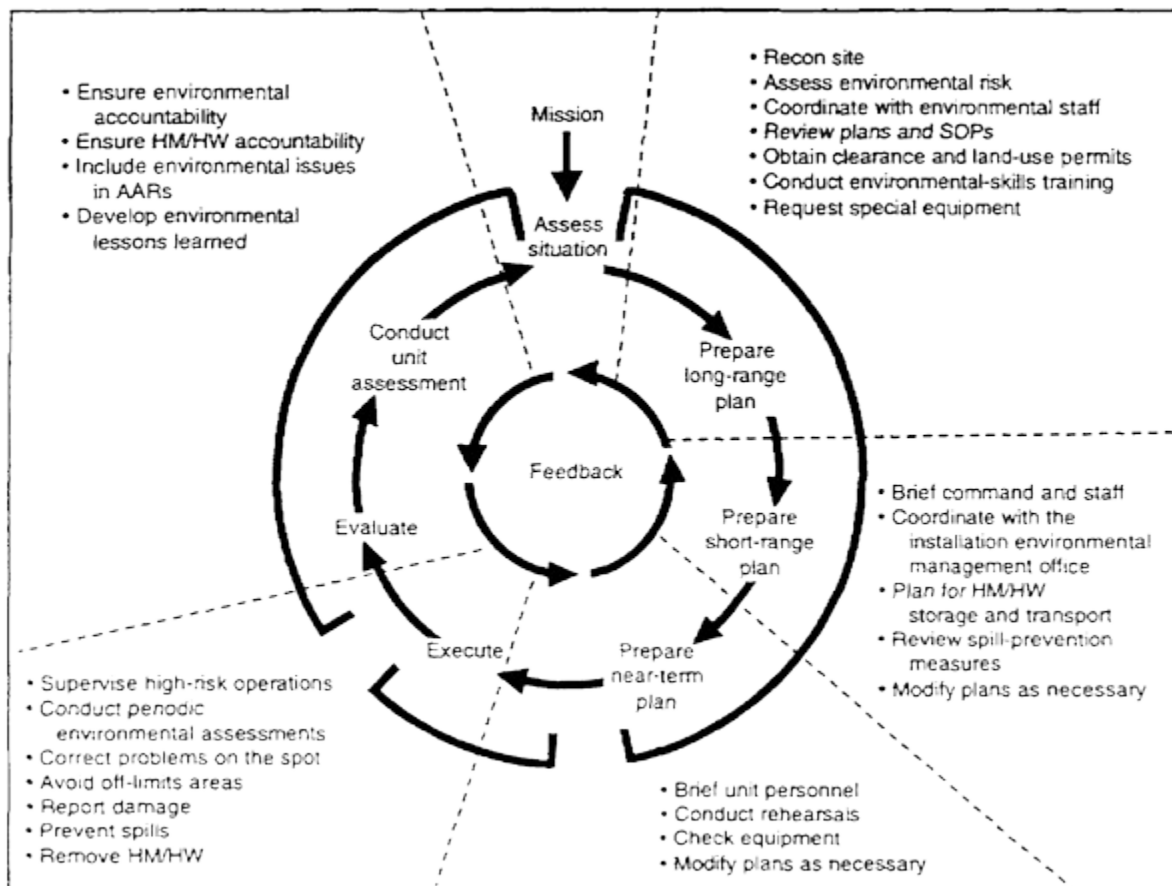
- Issue specific environmental guidance and update risk-assessment matrices and unit SOPs.
- Ensure that soldiers are well-trained.
- Obtain maps that indicate environmentally sensitive areas.
- Coordinate with the environmental office to ensure that unique issues are addressed.
- Conduct training meetings to address specific methods for protecting the environment without lowering standards or readiness.

c. Near-Term Planning. During the near-term planning cycle-

- Inspect equipment and ensure that proper maintenance is ongoing.
- Use weekly training meetings to discuss potential problems and look for ways to avoid problems in the field.

**3-4. Execution and Evaluation of Manning Actions.** Platoon leaders are instrumental in assuring that all environmental tasks are addressed, trained, performed, and evaluated according to pertinent laws and regulations.

a. During mission planning, leaders must consider what actions to take to accomplish the planned activities and to ensure observation of environmental restrictions and prevention measures. See [Figure 3-2](#) to review environmental issues that should be addressed in each phase of the training-management cycle. Platoon leaders are responsible for minimizing the damage to the environment as outlined in FM 20-400. Units should supplement the self-assessment checklist to fit any unique requirements. Platoon leaders should review the self-assessment-checklist before mission execution and employ appropriate techniques as necessary to minimize environmental impact.



**Figure 3-2. Phases within the training-management cycle**

b. Proper integration of environmental issues into the planning process can be evaluated during an AAR. An AAR should reinforce correct actions and stress that subordinate leaders and soldiers must become environmental stewards who understand their individual responsibilities to protect the environment. [Table 3-3](#) provides a guide for environmental responsibilities at various organizational levels.

Level	Actions
Units	<p>Define unit environmental programs based on installation regulations, directives, and OPORDs.</p> <p>Establish SOPs based on unit environmental plans.</p> <p>Integrate installation and operational requirements into daily routines.</p> <p>Include guidance for subordinate leaders and soldiers.</p>
Subordinate leaders	<p>Communicate the Army environmental ethic.</p> <p>Develop and sustain a positive and proactive commitment to environmental protection.</p> <p>Identify environmental risks associated with individual, collective, and mission-essential task list (METL) task performance.</p> <p>Plan and conduct environmentally sustainable actions and training.</p> <p>Protect the environment during training and other activities.</p> <p>Analyze the influence of environmental factors on mission accomplishment.</p> <p>Integrate environmental considerations into unit activities.</p> <p>Train peers and subordinates to identify the effects of plans, actions, and missions on the environment.</p> <p>Counsel soldiers on the importance of protecting the environment.</p> <p>Counsel soldiers on possible consequences of not complying with environmental laws and regulations.</p> <p>Ensure that soldiers are familiar with unit SOPs.</p> <p>Supervise soldiers' compliance with laws and regulations.</p> <p>Incorporate environmental considerations into AARs.</p>
Soldiers	<p>Comply with the unit's environmental requirements and SOPs.</p> <p>Maintain environmental awareness throughout daily activities.</p> <p>Provide recommendations to the chain of command on techniques for compliance.</p> <p>Identify environmental risks associated with individual and team tasks.</p> <p>Support recycling programs.</p>

**Table 3-3. Environmental responsibilities by organizational level**

**3-5. Summary.** This lesson addressed the platoon leaders' responsibility to integrate environmental considerations into a unit's training-management cycle. Depending on the unit and the situation, additional coordination may be required.

---

## LESSON 3

### PRACTICE EXERCISE

**Instructions** The following items will test your understanding of the material covered in this lesson. There is only one correct answer for each item. When you have completed the exercise, check your answers with the answer key that follows. If you answer any item incorrectly, review that part of the lesson which contains the portion involved.

1. How can environmental training issues be integrated into planning actions?
  - ☐ A. Input the needs into the training-management cycle.
  - ☐ B. Use the life-cycle management system.
  - ☐ C. Provide input into the systems approach to training process.
  - ☐ D. Contact the Army Environmental Center.
2. What time period does the long-range planning phase in the training-management cycle cover?
  - ☐ A. 1 to 3 weeks
  - ☐ B. 4 to 6 weeks
  - ☐ C. 3 months
  - ☐ D. 12 to 36 months
3. Who is responsible to plan training at the platoon level?
  - ☐ A. Operations and training officer
  - ☐ B. Platoon sergeant
  - ☐ C. Platoon leader
  - ☐ D. Squad leader
4. How is training evaluated?
  - ☐ A. Promotions
  - ☐ B. Fines
  - ☐ C. Training-management cycle
  - ☐ D. AAR

## PRACTICE EXERCISE

### ANSWER KEY

1. How can environmental training issues be integrated into planning actions?
  - [A. Input the needs into the training-management cycle.](#)
  - B. Use the life-cycle management system.
  - C. Provide input into the systems approach to training process.
  - D. Contact the Army Environmental Center.
2. What time period does the long-range planning phase in the training-management cycle cover?
  - A. 1 to 3 weeks
  - B. 4 to 6 weeks
  - C. 3 months
  - [D. 12 to 36 months](#)
3. Who is responsible to plan training at the platoon level?
  - A. Operations and training officer
  - B. Platoon sergeant
  - [C. Platoon leader](#)
  - D. Squad leader
4. How is training evaluated?
  - A. Promotions
  - B. Fines
  - C. Training-management cycle
  - [D. AAR](#)

## **APPENDIX A**

### **LIST OF COMMON ACRONYMS**

<b>1LT</b>	first lieutenant
<b>AAR</b>	after action review
<b>ACCP</b>	Army Correspondence Course Program
<b>AFB</b>	assault float bridge
<b>AIPD</b>	Army Institute for Professional Development
<b>AMEDD</b>	Army Medical Department
<b>AO</b>	area of operations
<b>APO</b>	Air Post Office
<b>AR</b>	Army regulation
<b>ARTEP</b>	Army Training and Evaluation Program
<b>attn</b>	attention
<b>AV</b>	automatic voice network
<b>AWR</b>	answer weight reference
<b>CFC</b>	chlorofluorocarbon
<b>COA</b>	course of action
<b>CONUS</b>	continental United States
<b>DA</b>	Department of the Army
<b>DINFOS</b>	Defense Information School
<b>DOT</b>	Department of Transportation
<b>DSN</b>	Defense Switched Network



<b>EBS</b>	environmental baseline survey
<b>ECAS</b>	Environmental Compliance Assessment System
<b>ECE</b>	environmental compliance evaluation
<b>ECO</b>	environmental compliance officer
<b>EMO</b>	environmental management office
<b>EN</b>	engineer
<b>ENCORD</b>	engineer coordinator
<b>EPA</b>	Environmental Protection Agency
<b>FM</b>	field manual
<b>FTX</b>	field training exercise
<b>HM</b>	hazardous material
<b>HN</b>	host nation
<b>HW</b>	hazardous waste
<b>i.e.</b>	that is
<b>IPD</b>	Institute for Professional Development
<b>IS</b>	interschool
<b>Jan</b>	January
<b>JFK</b>	John Fitzgerald Kennedy
<b>Jun</b>	June
<b>MCRP</b>	Marine Corps reference publication
<b>METL</b>	mission-essential task list
<b>MI</b>	middle initial
<b>MO</b>	Missouri

<b>MOS</b>	military occupational specialty
<b>MSDS</b>	material safety data sheet
<b>MTP</b>	mission training plan
<b>NCO</b>	noncommissioned officer
<b>OCONUS</b>	outside continental United States
<b>OPLAN</b>	operation plan
<b>OPORD</b>	operation order
<b>POL</b>	petroleum, oil, and lubricants
<b>RCOAC</b>	Reserve Component Officer's Advanced Course
<b>reg</b>	regulation
<b>RS</b>	response sheet
<b>RYE</b>	retirement year ending
<b>SGT</b>	sergeant
<b>SOP</b>	standing operating procedure
<b>SSN</b>	social security number
<b>TACSOP</b>	tactical standing operating procedure
<b>TC</b>	training circular
<b>TM</b>	technical manual
<b>TSP</b>	training support package
<b>UCMJ</b>	Uniform Code of Military Justice
<b>US</b>	United States
<b>USC</b>	United States Code
<b>VA</b>	Virginia
<b>XO</b>	executive officer

## **APPENDIX B**

### **RECOMMENDED READING LIST**

The following publications provide additional information about the material in this subcourse. You do not need these materials to complete this subcourse.

Army Training and Evaluation Program (ARTEP) 5-145-32-Mission Training Plan (MTP).

*Mission Training Plan for the Engineer Bridge Company.* 19 July 1991.

FM 20-400. *Military Environmental Protection.* To be published within six months.

FM 25-101. *Battle-Focused Training.* 30 September 1990.

FM 71-1. *Tank and Mechanized Infantry Company Team.* 26 January 1998.

TC 20-401. *Soldier's Environmental Handbook.* To be published within six months.

TC 25-30. *A Leader's Guide to Company Training Meetings.* 27 April 1994.

TSP 051-E-0005. *Training Support Package for Task Title: Supervise Platoon Compliance with Host-Nation, Federal, State, and Local Environmental Laws and Regulations.* To be published within six months.

## **APPENDIX C**

### **PUBLICATION EXTRACT**

FM 20-400. To be published within six months.

Use the above publication extract to take this subcourse. At the time this subcourse was written, this was the current publication. In your work situation, always refer to the latest official publication.

## Appendix I

### Unit Environmental Self-Assessment

This appendix provides a generic checklist for leaders to assess the state of their unit's environmental program and the unit's compliance with environmental laws and regulations. Leaders should check with their installation/operational staffs to incorporate applicable state, local, or HN environmental regulations. Once supplemented, this list serves as a tool to conduct a unit's environmental self-assessment. All "no" responses will require corrective action. A more comprehensive assessment (if desired) can be conducted using ECAS or ECE checklists available from the installation or by requesting a courtesy visit from the installation environmental office.

YES NO I. Management


1. Is an ECO appointed in writing?
2. Is the ECO properly trained as soon as possible after the duty assignment?
3. Does the ECO maintain a file containing applicable references, appointing orders, inspection records, and training documents for the last 24 months?
4. Have all soldiers/Marines received the required environmental training? Is that training documented?
5. Does the unit's SOP cover spill prevention and response?
6. Does the unit's SOP cover the use of the MSDS?
7. Does the unit SOP cover pollution prevention?

Unit Environmental Self-Assessment I-1

**YES NO I. Management (continued)**


8. Does the unit have a recycling program?
9. Is good housekeeping evident in POL, HM, and HW storage areas?
10. Does the unit have appropriate references (ARs, FMs, TMs, installation regulations, command policies, SOPs) on hand?

**YES NO II. Accumulation Sites**


1. Are there adequate dikes or catchment areas around accumulation sites?
2. Are HW, used oil, or other possible pollutants stored in authorized containers?
3. Are used oil tanks pumped out when full?
4. Are containers properly labeled?
5. Are containers secured to prevent contamination by rainwater or any other potential contaminant?

**YES NO III. Hazardous Material/Hazardous Wastes**


1. Are amounts of HM on hand limited to the minimum needed (no stockpiling of HM)?
2. Is the unit's HM/HW inventory (quantity and location) up to date?
3. Do HW containers have drum logs to account for all additions and to specify personnel authorized to make additions to the containers?
4. Are MSDSs on hand for all HMs? Are MSDSs readily available to all workers with exposure to HMs?

I-2 Unit Environmental Self-Assessment

YES NO III. Hazardous Material/Hazardous Wastes (continued)


5. Is HW accumulated in authorized containers?
6. Are containers labeled according to directives?
7. Are containers in good condition and closed when not in use?
8. Are contents of containers compatible with the container?
9. Are accumulation start dates and HW labels on each HW container?
10. Are container storage areas inspected at required intervals?
11. Is HM/HW managed for prompt pick up and transportation to disposal facility according to directives?
12. Are used oil accumulation tanks only used for collection of used oil?
13. Are danger and warning signs conspicuously placed?
14. Is spill-prevention and -control equipment adequate?
15. Are personnel trained in the proper handling, collection, storage, or transportation of HM/HW?
16. Are dumpsters free of HM/HW items?
17. Are used POL cans and drums disposed of properly?
18. Are asbestos-containing parts (brake shoes, clutch plates, and equipment insulation) removed, collected, and disposed of properly?
19. Are batteries stored/disposed of properly?

Unit Environmental Self-Assessment I-3

YES NO III. Hazardous Material/Hazardous Wastes (continued)


20. Is equipment containing radioactive sources (i.e., gun/mortar sights, M&A1 alarms) properly stored to prevent breakage and release of radioactive materials? Are incidents reported properly?
21. Is ammunition stored properly?

YES NO IV. Solid Waste Management


1. Are procedures to reduce production of waste enforced?
2. Are product separation and recycling efforts in effect?
3. Are source reduction practices enforced?
4. Is the unit requisitioning only supplies needed (not stockpiling excessive materials)?
5. Is water, soap, kitchen grease, or garbage discharged into street, storm drainage system, or groundwater source while washing garbage cans and field kitchen equipment?
6. Are solid-waste containers kept closed?

YES NO V. Spill Prevention


1. Is the unit spill-prevention plan present? Is it understood and being followed?
2. Are oil, fuel, battery acid, hydraulic oil, or other HM spills properly reported?
3. Does the unit enforce prohibitions against discharging pollutants into storm or washrack drains or pouring pollutants on the ground or along fence lines?
4. Are small oil spills cleaned up promptly and effectively?



YES NO V. Spill Prevention (continued)


5. Are drip pans used under vehicles/equipment and spigots of POL product barrels where spills are likely to occur?
6. Is contaminated soil properly disposed of at designated authorized disposal area?

YES NO VI. Recycling Program


1. Is all material recycled according to directives?
2. Is the unit delivering material to the installation's recycling center?
3. Are recyclable materials source-separated?
4. Is contaminated material separated from recyclables?
5. Is the unit recycling all materials accepted by the installation's recycling center?
6. Are dumpsters free of recyclable items?
7. Are used cleaning solvents recycled/collected properly?

YES NO VII. Washracks


1. Are vehicles and/or equipment washed only in authorized washracks?
2. Is steam-cleaning equipment used only in authorized washracks?
3. Are washracks and vicinity free of contaminated soil, sand, and silt?

Unit Environmental Self-Assessment I-5

YES NO VII. Washracks (continued)


4. Are readable signs prominently posted to indicate which solvents or soap may be used, where appropriate?
5. Are metal gratings or baffles present and in good condition at washrack oil interceptor, catch basins, and floor drains?
6. Are washrack areas free of oil and/or fuel spills? Are the washrack areas free of oily rags and trash?
7. Are treatment devices (oil and grease interceptors, catch basins, collection ponds, drains, and tanks) properly maintained and serviced?
8. Does the SOP indicate how to request maintenance for and pumping of oil/water separators?
9. Are faucets and/or backflow preventors in good operating condition?
10. Are only authorized soap, solvent, or chemicals used with steam-cleaning equipment?
11. Are oil/water separators in good working condition?
12. Are vehicle/equipment/aircraft wastewater discharges tied into a treatment system?

YES NO VIII. Land Management


1. Are vehicles maneuvered only in authorized areas?
2. Are surface areas and curbs free of vehicular damage?
3. Is the area free of litter?
4. Is gravel used only in authorized areas and in an authorized manner?

YES NO VIII. Land Management (continued)


5. Are archeological, cultural, and historical resources safeguarded?
6. Are vegetation/trees only being cut, removed, or used with appropriate approval (range control/forester)?
7. Are personnel ensuring that garbage, refuse, and rubbish are never burned or buried on ranges or training areas without appropriate approval?
8. Are storm-water ditches in the vicinity of motor pools free of POL or other HM/HW?
9. Are detention ponds and sump-collection points functional and properly serviced?
10. Are paint-spray and battery and radiation-repair operations conducted properly and coordinated with the EMO, safety, and preventive-medicine offices?
11. Are collection points established with proper containers and servicing for all maintenance-generated wastes?
12. Does the unit fill in fighting positions and all other excavations upon exercise completion and redeployment?
13. Does the unit have a maneuver-damage control element for each operation? Are all damages properly reported and corrected according to command guidance?
14. Are refueling sites located away from sensitive areas such as wetlands, water sources, drainage areas, and endangered species habitats?
15. Does the unit have appropriate spill-prevention equipment at high-risk locations (refueling, maintenance, messing) and available to spill-prevention personnel?
16. Does the unit use track turning pads where appropriate?
17. Does the unit confirm and mark sensitive areas to prevent damage to endangered species habitat and archeological/cultural areas?
18. Does the unit conduct soldier environmental awareness briefings before an operation?

Unit Environmental Self-Assessment I-7

YES NO VIII. Land Management (continued)


19. Does the unit conduct smoke operations and the proper use of pyrotechnics according to local regulations and policies?
20. Does the unit coordinate with the installation/operational staff before an exercise to obtain information on the AO in regard to environmental issues?
21. Does the unit cross or ford streams/rivers at authorized areas?
22. Is the unit aware of noise restrictions (limited hours, rotary-wing operations, demolitions, proximity to civilian population, endangered species habitat) and comply with them?

YES NO IX. Local Supplemental Requirements (coordinate with installation EMO/operational staff)


- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.